

REMARKS

Claims 1, 20 and 24 are amended. Claims 41-59 are cancelled. Claims 1-40 remain in the application. Reconsideration of the application in view of the amendments and the remarks to follow is requested.

Applicant affirms the election to in response to the restriction requirement made herein.

The Examiner has required restriction under 35 U.S.C. §121 between I. claims 1-41 (drawn to a method of forming a device, classified in class 438, subclass 131), and II. claims 42-59 (drawn to a device, classified in class 257, subclass 50). Applicant hereby elects claims 1-41 drawn to a method for prosecution on the merits. Accordingly, claims 42-59 are cancelled.

A new copy of the specification is provided as requested by the Examiner.

Claims 1, 3, 5, 8, 10, 13-16, 18-20, 22, 23-28, 31, 33, 36-39, and 41 stand rejected under 35 U.S.C. §102(b) as being anticipated by Gambino et al. (6,081,021). Claims 2 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gambino et al. in view of Dixit et al. (5,233,217). Claims 4, 9 and 32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gambino et al. in view of Zhao et al. (5,674,787). Claims 6, 7, 12, 29, 30, and 35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gambino et al. in view of Lowrey et al. (5,110,754). Claims 11, 17, 34, and 40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gambino et al. in view of Husher et al. (5,171,715).

Regarding the anticipation rejection against claim 1 based on Gambino, such claim is amended to recite forming at least one isolation region laterally adjacent at least one of first and second electrical nodes. The amendment language is supported by the originally-filed application by at least the exemplary embodiments shown in Figs. 1-6. Gambino is devoid of any teachings to isolation regions, and an electronic search of the reference verifies the same. Accordingly, it is inconceivable that Gambino could teach or suggest **forming** at least one isolation region as recited in claim 1. Gambino fails to teach or suggest a positively recited limitation of claim 1, and therefore, claim 1 is allowable.

Claims 2-19 depend from independent claim 1, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are not shown or taught by the art of record.

Regarding the anticipation rejection against claim 20 based on Gambino, such claim is amended to recite a first electrical node within a substrate region comprising a first-type dopant and a second electrical node within a substrate region comprising a second-type dopant different from the first-type dopant. The amendment language is supported by the originally-filed application by at least the exemplary embodiments shown in Figs. 1-6, and described in the specification at pages 3-4. Gambino teaches first and second conductive interconnects 310 and 315 formed **within or over an** interlevel dielectric 305

(Figs. 4, 11 and 21; col. 5, lines 65-67 to col. 6, lines 1-10), wherein an exemplary interlevel dielectric 305 is silicon dioxide. Gambino does not teach doping the interlevel dielectric 305. Accordingly, it is inconceivable that Gambino could teach or suggest the first electrical node within a substrate region comprising a first-type dopant and the second electrical node within a substrate region comprising a second-type dopant **different** from the first-type dopant as recited in claim 20. Therefore, Gambino fails to teach or suggest a positively recited limitation of claim 20, and therefore, claim 20 is allowable.

Claims 21-23 depend from independent claim 20, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are not shown or taught by the art of record.

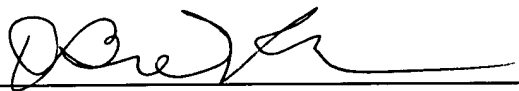
Regarding the anticipation rejection against claim 24 based on Gambino, such claim is amended to include the limitations of claim 41 and recites conductive plugs comprise a layer of titanium nitride against the dielectric material, and a mass of tungsten over the layer of titanium nitride. Gambino teaches only one multi-layer stack, and such stack includes TiW/Al for layer 302 in trench 332. Stack TiW/Al does not include titanium nitride. Accordingly, in no fair or reasonable interpretation does Gambino teach or suggest a mass of tungsten over the layer of titanium nitride as recited in claim 24. Gambino fails to teach or suggest a positively recited limitation of claim 24, and therefore, claim 24 is allowable.

Claims 25-40 depend from independent claim 24, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are not shown or taught by the art of record.

This application is now believed to be in immediate condition for allowance, and action to that end is respectfully requested. If the Examiner's next anticipated action is to be anything other than a Notice of Allowance, the undersigned respectfully requests a telephone interview prior to issuance of any such subsequent action.

Respectfully submitted,

Dated: 6-4-03

By: 
D. Brent Kenady
Reg. No. 40,045